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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,061

07/10/2006

Yann Picard

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94518 7590 12/21/2010

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EXAMINER

AN, SHAWN S

ART UNIT

PAPER NUMBER

2483

MAIL DATE

DELIVERY MODE

12/21/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,061	<b>Applicant(s)</b> PICARD, YANN	
	<b>Examiner</b> SHAWN AN	<b>Art Unit</b> 2483	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### ***Election/Restrictions***

1. As per Applicant's instruction as filed on 7/10/06, claims 1, 3-6, 8, 11-13, and 16 have been amended.
2. Restriction to one of the following inventions (groups) is required under 35 U.S.C. 121:
  - I. ***Claims 1-8, 13-14, and 16*** drawn to a device/method for compressing video information in a video sequence, comprising:
    - means for segmenting the first video frame containing image data into segments;
    - means for searching, in a second video frame following the first video frame in the video sequence, a corresponding predicted segment which matches with the segment of the first video frame according to a predetermined similarity measure, for each segment of the first video frame;
    - means for calculating a raw set of motion parameters describing the motion between the segment of the first video frame and the corresponding predicted segment of the second video frame, for each segment of the first video frame;
    - means for searching, in the first video frame, a corresponding segment that matches with the predicted segment of the second video frame according to a predetermined similarity measure, for each corresponding predicted segment of the second video frame; and
    - means for calculating a best set of motion parameters describing the motion between the corresponding segment of the first video frame and the predicted segment of the second video frame said best set of motion parameters consisting in the raw set of motion parameters corrected by a motion parameter correction, for each corresponding predicted segment of the second video frame, classified in class 375, subclass 240.16;

**II. Claims 9-12 and 15** drawn to a device/method for decompressing video information in a video sequence comprising:

- means for segmenting said first video frame containing image data into segments;
- means for defining a projected segment for each segment of the first video frame, by applying to the segment of the first video frame, a raw set of motion parameters describing the motion between the segment of the first video frame and the corresponding projected segment;
- means for finding, in the first video frame, a corresponding improved segment using both the raw set of motion parameters and a motion parameters correction, the corresponding improved segment being the segment of Bt that would be projected on the corresponding projected segment by applying to it the raw set of motion parameters corrected by the motion parameters correction, for each corresponding projected segment; and
- means for defining a corrected projected segment by applying the raw set of motion parameters corrected by the motion parameters correction to the corresponding improved segment, for each corresponding projected segment, classified in class 375, subclass 240.25.

The inventions are distinct, each from the other because of the following reasons:

**3.** Inventions of Groups I and II as represented above are directed to related fields of endeavor. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed meet all of the above distinct criteria(s). Furthermore, there is nothing of record to show them to be obvious variants.

Restriction for examination purposes as indicated is proper because inventions listed in this action are independent or distinct for the reasons given above and there

would be an extra search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph;
- (f) the prior art searching of diverse/different classifications and a prosecution of all of the currently pending claims as above would be an additional burden based on two distinct (independent) groups/Inventions and the limited amount of time allocated/given for the examination process and/or prosecution of each groups/inventions;
- (g) two distinct (independent) Groups/Inventions, wherein each of the Groups has diverse elements between its respective drawings/figures, wherein one Group of embodiment is not deemed obvious over any other Groups of embodiments identified; and
- (h) a reasonable search for one Group/Inventions does not necessarily encompass/cover other Group(s)/Inventions corresponding to other set of claims.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly

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and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn An* whose telephone number is (571) 272-7324.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Joseph Ustaris can be reached on 571-272-7383.

5. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SHAWN AN/

Primary Examiner, Art Unit 2483